

Governor

## State of Utah

#### DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER September 30, 2016

Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA Division Director

SPENCER J. COX Lon Thomas Star Stone Quarries 4040 South 300 West Salt Lake City, Utah 84107

Third Review of Amended Notice of Intention to Commence Large Mining Operations, Star Stone

Quarries, Torrey Quarry, M/055/0016, Wayne County, Utah

Dear Mr. Thomas:

The Division of Oil, Gas and Mining has reviewed the referenced amended Notice of Intention to Commence Large Mining Operations (Notice) which was received September 13, 2016. The attached comments will need to be addressed before tentative approval may be granted.

The comments are listed under the applicable Minerals Rule heading; please format your response in a similar fashion. Please address only those items requested in the attached technical review by sending replacement pages for the original Notice using redline and strikeout text. After the Notice is determined technically complete, the Division will ask that you submit two clean copies. Upon final approval, both will be stamped approved, and one copy will be returned for your records.

Attached are spreadsheets for the placement of topsoil. The Division used the productivity numbers that were cited and then computed the productivity factor. Please use the modified productivity numbers.

Please submit your response to this review by October 31, 2016.

The Division will suspend further review of the Notice of Intention until your response to this letter is received. Please contact Wayne Western, at 801-538-5263 or me at 801-538-5261 if you have questions concerning the review.

Sincerely.

Paul B. Baker

Minerals Program Manager

PBB: whw: eb

Attachment: Review, Spreadsheets

John Reay, Hanksville BLM (jreay@blm.gov)



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# THIRD REVIEW OF AMENDED NOTICEOF INTENTION TO COMMENCE LARGE MINING OPERATIONS

Star Stone Quarries Torrey Quarry M/055/0016 September 28, 2016

### **General Comments:**

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
	5 of 21	Under MAP#4 and MAP #5 there are references to a request for variance for the road and 0.25 acres of exposed rock. There is no reference to any variances in Section R647-4-112. Please remove reference to the variances as they are not needed. Roads are in themselves not a land use: they are part of another land use, such as grazing or wildlife habitat management.		

### R647-4-110 - Reclamation Plan

110.2 - Reclamation of roads, highwalls, slopes, impoundments, drainages, pits, piles, shafts, adits, etc

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
	Page 6 of 21	The public road passing through the mining area will be side shifted as needed during mining operations. Please show that you have been authorized to alter the public road.		
	Page 15 of 21	The Notice says the road will not be reclaimed because it was in existence prior to the mine. Since the road would be shifted as part of the mining operations, the Notice needs to address the condition of the road at reclamation.		
	Page 5 of 21	Any excavation deeper than 10' will be benched at a ratio of 2H:1V resulting in a highwall angle of 45 degrees of less. However in Section 110.2, the Notice says no highwalls over 10' in depth will be created. Please be consistent with the maximum highwall depth.		
	Page 15 of 21	In subsection Highwalls, the Notice does not address how highwalls will be reclaimed. Rule R647-4-111.4 requires that at reclamation highwalls have a slope of 45 degrees or less. Please explain how highwalls will be reclaimed.		
	Map 7	The map shows a highwall that will have an overall (toe to crest) slope of 45 degrees with benches. Since the plan now calls for maximum highwall of 10 feet, the map no longer reflects what will be done in reclamation. Please update.		

#### R647-4-113 - Surety

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Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
		The Division looked at the costs for topsoil placement proposed by the Operator. In the calculations, the productivity factors were not used. Please see worksheets used by the Division.		
		The calculations for regrading the dump show a volume of 120 feet by 11.5 feet by 4 feet. Based on the maps the northern edge of the dump is 120 feet which suggests that only a small part of the dump will be regraded. The dump will have an area of 0.75 acres (32,670 square feet). If the dump were circular, the circumference would be 640 feet – much greater than the proposed 120 linear feet. Please revise the calculation for the entire dump.		
		The calculations for regrading the back fill edge is based on a volume of 200 feet by 5.75 feet by 2 feet. Since the mine is over 1,100 feet long and 900 feet wide there will be more than 200 linear feet of backfill needed. Also the maximum depth of the backfill is two feet. Based on the plan more than two feet of backfill will be needed. Please revise the calculations.		
		Please include costs for reclaiming highwalls. Highwalls need to either be backfilled to 2H:1V or reduced to a 45-degree slope. The two methods to reclaim the site are backfill (which would require more fill than projected to be available) or reduce the slopes to 45 degrees or less.		
	Page 8 of 21	Please include the cost to place material from the waste dump onto three acres of exposed bedrock.		